

**Advisory Action**  
**Before the Filing of an Appeal Brief**

<b>Application No.</b> 10/801,544	<b>Applicant(s)</b> FUKUSHIMA, KAZUHIISA
<b>Examiner</b> Bradley L. Sisson	<b>Art Unit</b> 1634

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 25 June 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.  
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
 Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: 1-3, 7 and 8

Claim(s) withdrawn from consideration: \_\_\_\_\_

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
 13. ☐ Other: \_\_\_\_\_

/Bradley L. Sisson/  
Primary Examiner  
Art Unit: 1634

Continuation of 11, does NOT place the application in condition for allowance because:

At page 2, bridging to page 5, of the response received 25 June 2008, argument is presented that the definition of "area" being used by the Office does not following he implied meaning to be found in the specification. This argument has been considered and has not been found persuasive. A text search of the originally-filed application, including claims, fails to find where the term "area" has been used in any manner, much less be used and defined, be it explicitly or otherwise. Accordingly, applicant's arguments as to what the application as originally filed was to be construed as meaning, at least with regard to this term, has not been found persuasive towards the withdrawal of rejection of claims under 35 USC 112, second paragraph.

At pages 5-10 of the response argument is presented that US Patent 5,635,045 (Alam) does not teach the claimed invention. In support of this position, alternative means for interpreting the claims and Alam are presented.

The above arguments have been fully considered and have not been found persuasive towards the withdrawal of the rejection of claims 1-3 under 35 USC 106(b) as being anticipated by Alam.

As an initial matter, it is noted that the term "area" is not used at all in the original disclosure, and that the term "partition" is used but three times in the original disclosure (page 6, penultimate line; claim 4 and claim 9), and then the term is used to define a gel that "partitions" a buffer into first and second buffer, and optionally, into a third buffer. This definition is seemingly ignoring the aspect that the same buffer is to be found on all sides of (including above) as well as within the gel.

Using claim 1 as an example, one is to first "partition a container," which, when in light of the disclosure, could simply be the placing of a gel within a container, therein separating the buffer on both sides of the container into an A and a B buffer. Clearly, Alam teaches this aspect. Claim 1 also requires one to move the target biopolymer "through said partition." Again, Alam teaches this limitation as the nucleic acid is subjected to electromotive force and migrates through the gel.

Claim 1 also requires the target biopolymer to be moved into a "second area using electrophoresis." Here, Alam teaches moving the nucleic acid through the gel until it reaches an area that is excised. The area that is excised is considered to meet the limitation of applicant's "second area."

Claim 1 further requires "separating said target biopolymer from said buffer in said second area." Here, Alam teaches that an area of the gel, comprising the target biopolymer, is excised and later eluted. The part of the gel that is excised is considered to meet the limitation of the "second area," and the aspect of physically removing the section of gel is considered to meet the limitation of "separating the target biopolymer from a buffer in the second area." (See Alam at column 1, lines 41-52). To the degree that Alam also teaches use of a membrane, and that the target biopolymer may be eluted from same, the movement of the membrane, or nucleic acid found in an area adjacent to the membrane, from the original electrophoresis device to that of a second device, wherein he target biopolymer is eluted, is also considered to meet the limitations of claims 1-3 as the biopolymer is removed from one container, and its associated buffer, therein meeting a limitation of the claims.

As shown above, Alam teaches the limitations of claims 1-3, and accordingly, the rejection of claims 1-3 under 35 USC 102(b) is maintained.

At pages 11-15 of the response argument is presented that US Patent 5,009,759 (Serwer et al.) does not teach, or render obvious, the invention of claims 1-3, and as such, the rejection of claims under 35 USC 102(b), or in the alternative, under 35 USC 103(a), should be withdrawn. In support of this position, attention is directed to the limitations of first and second areas being separated by a partition, and that the partition can be a gel.

The above argument has been considered and has not been found persuasive towards the withdrawal of the rejection. Using claim 1 as an example, it is noted that the method calls for at least two areas, and that there is at least one partition. The claim does not exclude additional partitions or areas.

Serwer et al. teaches in the abstract, that they disclose a method of separating nucleic acids via electrophoresis wherein the gel has a constant amount of agarose, but different pore sizes and different buffer within the gel. The aspect of different pore sizes is considered to meet the limitation of an infinite number of partitions, which happen to be adjacent to one another. As the gradient of pore sizes changes, so does the buffer. Accordingly, the movement of the nucleic acid through the gel also moves the nucleic acid from a first, to a second, and on to an nth different buffer/area. Such a showing is deemed to meet the limitations of claims 1-3.

Argument is also advanced that Serwer et al., also does not teach the limitation of claim 2 in that there is required a third buffer area. This argument is not persuasive for as shown immediately above, the buffer changes at the same time that the gel pore size changes.

Accordingly, the infinite number of difference in pore sizes also speaks directly to an inherent infinite number of buffers that make of the gradient.

At pages 15-16 of the response argument is advanced that claims 7 and 8 are not rendered obvious under 35 USC 103(a) by the combined teachings of Alam in view of US Patent Application Publication 2006/0127942 (Straume et al.). Attention is directed to the prior arguments against Alam and how those limitations are also the basis of claims 7 and 8. This argument has been considered and has not been found persuasive for as shown above, Alam is still deemed to reasonably teach the limitations of claims 1-3 and therein, is still applicable against claims 7 and 8.

For the above reasons, and in the absence of convincing evidence to the contrary, the rejection of claims 1-3, 7, and 8 are maintained.